Diseases and Conditions Reported to Public Health Agencies—Idaho, 2015

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ssessment of the population's health is a core public Ahealth function. Surveillance for communicable diseases is one means of assessment. Epidemiologic surveillance is the systematic collection, analysis, and dissemination of health data for the planning, implementation, and evaluation of health programs. The Idaho Division of Public Health, Bureau of Communicable Disease Prevention (BCDP) Epidemiology Program includes epidemiologists who work with Public Health District epidemiologists and healthcare providers to collect information on cases of reportable communicable diseases and other conditions to determine disease impact, assess trends in disease occurrence, characterize affected populations, prioritize control efforts, and evaluate prevention strategies. Prompt reporting by healthcare providers and laboratories allows sporadic cases and clusters of cases to be recognized in a timeframe when control measures are most likely to be effective in preventing additional cases.

In Idaho, public health disease reporting is not centralized; healthcare providers can submit disease reports to the BCDP Epidemiology Program or local Public Health Districts. Diseases and conditions are reported pursuant to Idaho Reportable Diseases (Idaho Administrative Code 16.02.10, https://adminrules.idaho.gov/rules/current/16/0210.pdf). As stated in these rules, physicians, healthcare facilities, laboratories, and others are required to report specified diseases and conditions. Reporting sources can designate an individual within an institution to perform routine reporting duties (e.g., an infection control preventionist for a hospital). Provisions

of the Health Insurance Portability and Accountability Act (HIPAA) allow for routine disease reporting to public health authorities without patient authorization. Data maintained for reportable disease surveillance purposes are private and protected from redisclosure under state and federal law.

The table summarizes cases of selected communicable diseases reported during calendar year 2015. Incidence rates in this report were calculated using disease-specific numerator data collected during 2015 and a standardized set of denominator data derived from 2015 United States Census data. Pertinent observations for some of these diseases follow.

Botulism (infant)

Infant botulism is the most common presentation of botulism in the United States and Idaho. During 2010–2014, zero to 2 infant botulism cases were reported in Idaho each year. In 2015, Idaho received reports of two sporadic cases of infant botulism; both were caused by toxin type A, one of the two most common toxin types detected in infant botulism. Patients were aged 2 months and 7 months at illness onset; both were hospitalized and recovered. The California Infant Botulism Treatment and Prevention Program is the sole source for botulism immune globulin intravenous (human) (BIG-IV) for infants (AKA Baby BIG®) http://www.infantbotulism. org/.

Campylobacteriosis

Campylobacter continues to cause significant enteric illness in Idaho. In 2015, the national surveillance case

Table. Incidence and incidence rates for selected communicable diseases, 2015—Idaho

Disease / Condition	Incidence	Incidence Rate*
Amebiasis	3	0.2
Botulism, infant	2	0.1
Campylobacteriosis	409	24.7
Chlamydia	5,627	340.0
Cryptosporidiosis	95	5.7
E. coli STEC	157	9.6
Giardiasis	161	9.7
Gonorrhea	472	28.5
H. influenzae, invasive disease	27	1.6
Hepatitis A	14	0.9
Hepatitis B, acute	13	0.8
Hepatitis C, acute	4	0.2
HIV	43	2.6
Lead, elevated blood levels	127	7.7
Legionellosis	13	0.8
Listeriosis	4	0.2

Lyme Disease 9 0.5 Malaria 6 0.4 Meningitis, viral or aseptic 35 2.1 Meningococcal disease 0 0.0 MRSA infection, invasive 79 4.8 Pertussis 194 11.7 Q fever 1 0.1 Respiratory syncytial virus 1,052 63.6 Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8 Yersiniosis 12 0.7	Disease / Condition	Incidence	Incidence Rate*
Meningitis, viral or aseptic 35 2.1 Meningococcal disease 0 0.0 MRSA infection, invasive 79 4.8 Pertussis 194 11.7 Q fever 1 0.1 Respiratory syncytial virus 1,052 63.6 Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Lyme Disease	9	0.5
Meningococcal disease 0 0.0 MRSA infection, invasive 79 4.8 Pertussis 194 11.7 Q fever 1 0.1 Respiratory syncytial virus 1,052 63.6 Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Malaria	6	0.4
MRSA infection, invasive 79 4.8 Pertussis 194 11.7 Q fever 1 0.1 Respiratory syncytial virus 1,052 63.6 Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Meningitis, viral or aseptic	35	2.1
Pertussis 194 11.7 Q fever 1 0.1 Respiratory syncytial virus 1,052 63.6 Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Meningococcal disease	0	0.0
Q fever 1 0.1 Respiratory syncytial virus 1,052 63.6 Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	MRSA infection, invasive	79	4.8
Respiratory syncytial virus 1,052 63.6 Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Pertussis	194	11.7
Salmonellosis 588 35.5 Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Q fever	1	0.1
Shigellosis 31 1.9 S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Respiratory syncytial virus	1,052	63.6
S. pyogenes (Group A Strep), invasive 57 3.4 Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Salmonellosis	588	35.5
Syphilis, all stages 102 6.2 Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	Shigellosis	31	1.9
Tuberculosis 11 0.7 Tularemia 2 0.1 West Nile virus infection 13 0.8	S. pyogenes (Group A Strep), invasive	57	3.4
Tularemia 2 0.1 West Nile virus infection 13 0.8	Syphilis, all stages	102	6.2
West Nile virus infection 13 0.8	Tuberculosis	11	0.7
	Tularemia	2	0.1
Yersiniosis 12 0.7	West Nile virus infection	13	0.8
	Yersiniosis	12	0.7

BUREAU OF COMMUNICABLE DISEASE PREVENTION

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definition for campylobacteriosis was updated to include infections identified through the use of culture independent diagnostic tests (CIDTs), including serologic and molecular testing. The definition change is the single largest factor resulting in a 49% increase in the number of Campylobacter infections classified as cases in 2015 (n=409) compared with the average annual incidence during 2006 through 2014 (n=275). Clinical laboratories are encouraged to voluntarily submit CIDT-positive enteric samples to the Idaho Bureau of Laboratories (IBL) to confirm results.

Chlamydia

Chlamydia trachomatis infections are the single most commonly reported disease in Idaho and the United States. The 2015 incidence rate in Idaho of 340 per 100,000 population is the highest incidence rate recorded in the state, although it is still lower than the national incidence rate (448.6 per 100,000 population in 2014). Chlamydia continues to be reported most frequently in the age groups 15–19 and 20–24 years. To help control chlamydia, the Division of Public Health encourages expedited partner therapy by Idaho healthcare providers (http://healthandwelfare.idaho.gov/Health/HIV,STD,HepatitisPrograms/STDPrevention/ExpeditedPartnerTherapy/tabid/3171/Default.aspx).

Gonorrhea

After years of decline, the incidence rate of gonorrhea in Idaho has risen to alarming levels. This increase in Idaho, which began in mid-2013, has been widespread geographically and is similar to increases observed in other western states (http://www.cdc.gov/std/stats14/figures/14.htm). The 2015 incidence rate of 28.5 per 100,000 population is the highest reported infection rate since 1988 (32.2 per 100,000 population). Although increases in national incidence rates have been attributed to increased incidence of disease among males (http://www.cdc.gov/std/stats14/gonorrhea.htm), in Idaho, the proportion of males among reported cases has remained

Idaho Disease Bulletin

Idaho Department of Health and Welfare Division of Public Health P.O. Box 83720 Boise, ID 83720-0036 ROUTINE 24-Hour Disease Reporting Line 1.800.632.5927 EMERGENCY 24-Hour Reporting Line 1.800.632.8000

An electronic version of the Idaho Reportable Diseases Rules may be found at http://adminrules.idaho.gov/rules/current/16/0210.pdf.

Current and past issues are archived online at www.idb.dhw.idaho.gov.

stable, as have other demographic categories. Prompt dual treatment with ceftriaxone and azithromycin or another CDC-recommended alternative (http://www.cdc.gov/std/tg2015/) is advised to help control gonorrhea.

Elevated Blood Lead Levels

Reporting rules for blood lead level (BLL) were revised in 2015; the reportable BLL among children aged <18 years was lowered from 10 ug/dL to 5 ug/dL. This change resulted in an increase in incidence of reported elevated BLLs attributed completely to the change in reporting laws. In 2015, 74 (58%) of the 127 reported cases of elevated BLL were among children; of those 74 cases, 41 (55%) had a BLL between 5 ug/dL and 10 ug/dL; only 7 (9%) had a BLL \geq 20 ug/dL. All children eligible for Medicaid must be tested for elevated BLL

at 12 and 24 months of age, or between 24 months and 21 years of age if not previously tested (http://healthandwelfare.idaho.gov/Medical/Medicaid/MedicalCare/LeadTestingProgram/tabid/692/Default.aspx).

Pertussis

After a record high incidence of pertussis in 2014 at 22.5 per 100,000 population, the rate of reported pertussis cases declined to 11.7 per 100,000 in 2015. Pertussis incidence generally has a 5-year cycle of increasing and decreasing incidence. Idaho's 2015 incidence rate is the lowest it has been since 2009.

Salmonellosis

The incidence of reported salmonellosis in 2015 was 588 cases, nearly three times higher than the annual average incidence of 161 reported cases per year during 2005–2014. This increase was largely caused by 275 cases linked to an outbreak of *Salmonella Enteritidis* associated with a Boise deli. This foodborne outbreak was

the largest in Idaho's history. Although a specific food item was not identified as a source, cross-contamination in the sandwich preparation area was considered the likely cause. Sources of infection are often difficult to determine in sporadic Salmonella cases; however, cases are typically linked to animal (e.g., reptiles, backyard poultry) or food (e.g., raw milk, produce) exposures. The use of CIDTs is expected to increase the number of cases detected and reported. CIDTs provide more rapid detection of pathogens than culture, but do not provide the bacterial isolates needed for serologic and molecular characterization that enables public health agencies to determine if cases might be linked to a common exposure. Clinical laboratories are encouraged to voluntarily submit CIDT-positive enteric samples to the IBL to confirm CIDT results and for fingerprinting to detect strains causing outbreaks.

Shiga-toxin producing Escherichia coli (STEC)

Reported cases of STEC among Idaho residents hit an all-time high in 2015 at 157 cases and an incidence rate of 9.49 per 100,000 population, about four times higher than the 2014 U.S. incidence rate (1.92 per 100,000 population). Idaho's incidence rates have generally been higher compared with the U.S. incidence rates since reporting of STEC infections in Idaho began in 1992. Both O157:H7 and non-O157:H7 STEC reports are tracked in Idaho; 61% of reported cases in 2015 were of non-O157 STEC serotypes. Most reported STEC cases were sporadic. Only 16 (10%) of case reports were outbreak-associated. Outbreaks were small, with an average of two reported cases per outbreak. Because STEC is an important cause of hemolytic uremic syndrome (HUS), healthcare providers must report HUS to Idaho public health authorities within one working day. Clinical laboratories are encouraged to voluntarily submit CIDT-

positive enteric samples to the IBL to confirm results and for fingerprinting to detect strains causing outbreaks.

Syphilis

The incidence rate of 6.2 per 100,000 population reported in 2015 represents a 121% increase from the 2.8 per 100,000 population incidence rate reported in 2014. Although syphilis cases were reported throughout Idaho during 2014, an ongoing outbreak of syphilis most heavily affecting Ada and Canyon Counties contributed to the very large increase in incidence of reported cases in 2015. Among outbreak-associated cases, patients who are men who have sex with men have been more commonly reported than patients with other risk factors. However, both men and women engaging in other risk behaviors (e.g., injection drug use) also represent a notable proportion of outbreak-associated cases. This outbreak led to recommendations to expand testing of pregnant women at high risk for syphilis during the third trimester and at delivery to include women with multiple sexual partners, with current alcohol or substance abuse, or diagnosed with another STD. See the April 2016 Idaho Disease Bulletin at http://healthandwelfare.idaho.gov/tabid/682/ Default.aspx to learn more about the Idaho outbreak.

References

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